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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,741	06/22/2006	Tsutomu Sato	72277	1012

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EXAMINER	
EOFF, ANCA	

ART UNIT	PAPER NUMBER
1795	

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05/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/596,741	SATO, TSUTOMU	
	Examiner	Art Unit	
	ANCA EOFF	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-12 are pending in the application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 1, 2008 has been entered.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

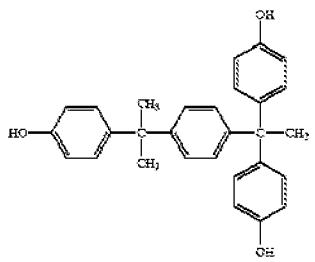
4. Claims 1-2, 5-7 and 10-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,911,300 to Sato et al. in view of Susukida et al. (WO 00/34289, wherein the citations are from the English equivalent, US Patent 6,475,693).

Sato et al. claim a plate making method, wherein a positive-type photosensitive composition is coated on a photogravure plated roll through a spiral coating system while rotated to form a natural dried coating film. The dried film is then exposed with an infrared wavelength laser and developed with alkaline developer .

The positive-type photosensitive composition comprises an alkali soluble high molecular substance with phenolic groups, a photothermal conversion substance and adherence characteristic reforming agents, equivalent to the compound C) of the instant application.

However, Sato et al. do not claim a dissolution inhibitor.

Susukida et al. disclose a radiation-sensitive resin composition containing a radiation-sensitive novolak resin and a dissolution inhibitor (column 2, lines 22- 32), such as the one represented by the formula (I):



(I) (column 9, lines 20-40).

The dissolution inhibitor is comprised in the radiation-sensitive resin composition in an amount of 2-20 parts by weight, preferably 5-15 parts by weight per 100 parts of the radiation sensitive composition (column 5, lines 30-32).

The positive-working radiation-sensitive composition of Susukida et al. shows high resolution and forms a pattern with good shape and a high aspect ratio, forms no scum and shows excellent micro-grooving properties (column 10, lines 60-64).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to use the dissolution inhibitor of Susukida et al. in the composition of Sato et al., in order to form patterns with good shape and high aspect ratio (Susukida et al, column 10, lines 60-64).

5. Claims 1-2, 5-7 and 10-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 7,226,724 to Sato in view of Susukida et al. (WO 00/34289, wherein the citations are from the English equivalent, US Patent 6,475,693).

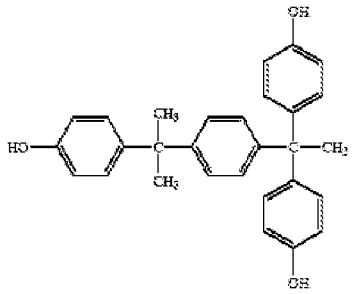
Sato claims a photogravure plate making method, wherein a positive-type photosensitive composition is coated on a photogravure plated roll, it is exposed with an infrared wavelength laser and developed with alkaline developing liquid without burning after the coating step.

The positive-type photosensitive composition comprises an alkali soluble high molecular substance with phenolic groups, a pigment having a characteristics for absorbing laser beam in the infrared wavelength region to perform thermolysis and

adherence characteristic reforming agents, equivalent to the compound C) of the instant application.

However, Sato does not claim a dissolution inhibitor.

Susukida et al. disclose a radiation-sensitive resin composition containing a radiation-sensitive novolak resin and a dissolution inhibitor (column 2, lines 22- 32), such as the one represented by the formula (I):



(I) (column 9, lines 20-40).

The dissolution inhibitor is comprised in the radiation-sensitive resin composition in an amount of 2-20 parts by weight, preferably 5-15 parts by weight per 100 parts of the radiation sensitive composition(column 5, lines 30-32).

The positive-working radiation-sensitive composition of Susukida et al. shows high resolution and forms a pattern with good shape and a high aspect ratio, forms no scum and shows excellent micro-grooving properties (column 10, lines 60-64).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to use the dissolution inhibitor of Susukida et al. in the composition of Sato et al., in order to form patterns with good shape and high aspect ratio (Susukida et al, column 10, lines 60-64).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidaka et al. (WO 00/29214) in view of Takeda et al. (US Pg-Pub 2004/0023153) and in further view of Ruckert et al. (US Patent 4,853,314).

With regard to claim 1, Hidaka et al. disclose a positive photosensitive printing plate composition comprising an alkali-soluble resin and a photo-thermal conversion material (page 8, lines 15-17).

The alkali-soluble resin can be a novolak resin or a polyvinyl phenol resin (page 30, line 14-page 31, line 19).

The photo-thermal conversion material is a material absorbing light having a wavelength range from 600 nm to 1,300 nm and converting it into heat (page 8, line 30-page 9, line 2).

The composition can also include a solubility-suppressing agent (page 32, lines 9-13), equivalent to the dissolution inhibitor of the instant application.

Hidaka et al. specifically disclose a photosensitive composition comprising

- 86.95 wt% of m-cresol/p-cresol/phenol alkali-soluble resin;

- 3.4wt% of the photo-thermal conversion material;

- 8.6 wt% of the solubility-suppressing agent, all based on the total weight of composition (page 59, lines 11-26).

It is known in the art, as shown by Takeda et al., that a small amount of dissolution retardant/inhibitor in a composition may not yield to a composition with an improved resolution and a large amount of dissolution inhibitor/retardant may lead to slimming of the patterned film and to a decline in resolution (par.0064).

Therefore, the amount of dissolution retardant/inhibitor is a result-effective variable and can be optimized.

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) (The claimed wastewater treatment device had a tank volume to contractor area of 0.12 gal./sq. ft. The prior art did not recognize that treatment capacity is a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result- effective variable.). See also *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (MPEP 2144.05-II. Optimization of Ranges)

It would have been obvious for one of ordinary skill in the art at the time of the invention to use the claimed amount of the dissolution inhibitor in the composition of Hidaka et al. as it has been shown that a high amount of dissolution inhibitor may produce the slimming of the patterned film and a decline in resolution (Takeda et al., par.0064).

Hidaka nor Takeda disclose a compound equivalent to the resin (C) of the instant application.

However, it is well-known in the art that a resin such as polyvinyl acetate is conventionally added to positive-working radiation-sensitive composition comprising

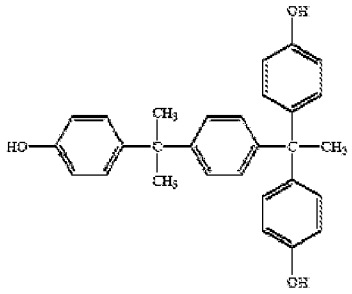
novolak resins and dissolution inhibitors, as evidenced by Ruckert et al. (US Patent 4,853,314) in column 4, lines 46-64.

Therefore, it would have been obvious to one of ordinary skill in the art to add polyvinyl acetate to the positive composition of modified Hidaka, with a reasonable expectation of success.

8. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidaka et al. (WO 00/29214) in view of Takeda et al. (US Pg-Pub 2004/0023153) and Ruckert et al. (US Patent 4,853,314) as applied to claim 1 above and in further view of Susukida et al. (WO 00/34289, wherein the citations are from the English equivalent, US Patent 6,475,693).

Hidaka modified by Takeda and Ruckert teaches the positive photosensitive composition of claim 1 (see paragraph 7 of the Office Action). Hidaka et al. teach a variety of solubility-supressing agents (page 32, line 15 – page 33, line 9), including compounds with a tryarylmethane skeleton (page 32, lines 18-19) but Hidaka, Takeda and Ruckert fail to disclose the solubility-suppressing agent of formula (1) of the instant application.

Susukida et al. disclose a radiation-sensitive resin composition containing a radiation-sensitive novolak resin and a dissolution inhibitor (column 2, lines 22- 32). In a specific example, Susukida et al. further disclose a positive-working composition comprising novolak resin C and a dissolution inhibitor represented by the formula (I):



(I) (column 9, lines 20-40). The compound has a triarylmethane skeleton.

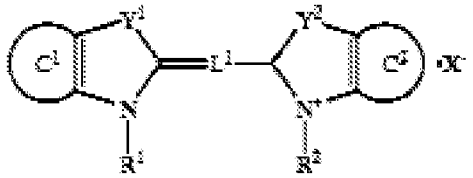
The positive-working radiation-sensitive composition shows high resolution and forms a pattern with good shape and a high aspect ratio, forms no scum and shows excellent micro-grooving properties (column 10, lines 60-64 and column 11, lines 1-2).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to use the dissolution inhibitor of Susukida et al. in the composition of modified Hidaka et al., since Hidaka et al. already disclosed the used of a dissolution inhibitor with a tryarylmethane skeleton and in order to obtain a composition showing high resolution and in order to form patterns with good shape and high aspect ratio, (Susukida et al, column 10, lines 60-64).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidaka et al. (WO 00/29214) in view of Takeda et al. (US Pg-Pub 2004/0023153) and Ruckert et al. (US Patent 4,853,314) as applied to claim 1 above and in further view of Parsons et al. (US Patent 6,280,899).

Hidaka modified by Takeda and Ruckert teaches the positive photosensitive composition of claim 1 (see paragraph 7 of the Office Action). Hidaka et al. further

disclose that one of the preferred photo-thermal conversion material is a cyanine dye represented by the formula (II):



(II) (compound of formula (I) on page 28)

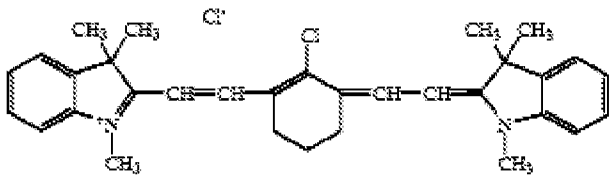
In the formula (II) above, each of the rings C^1 and C^2 can be benzene or naphthalene rings which may have a substituent, each of Y^1 and Y^2 are indepenendent of each other and can be dialkylmethylene groups or sulfur atoms, each of R^1 and R^2 can be hydrocarbon groups which may have a substituent, L^1 is a tri-, penta- or heptamethine group which may have a substituent, provided that two substituemts in said penta- or hepta-methine group may bond to each other to form a C_{5-7} cycloakene ring and X^- is a conterion (page 28, line 24-page 29, line 5).

However, Hidaka, Takeda nor Ruckert specifically disclose the compound of formula (2) of the instant application.

Parsons et al. disclose a heat-sensitive composition for lithographic printing plates comprising an aqueous developer soluble polymer, such as a phenolic resin, a compound that reduces the aqueous developer solubility of the polymer and an infrared absorber (abstract).

The infrared absorber can be an organic pigment or dyes such as a phthalocyanine pigment, a dye or a pigment of squarylium, merocyanine, cyanine, indolizine, pyrilium (column 9, lines 23-28). These compounds act as photo-thermal

conversion material, as disclosed by Hidaka et al (WO 00/29214, page 28, lines 14-19). Parsons et al. further disclose that the infrared absorbing material can be a compound having the formula (III):



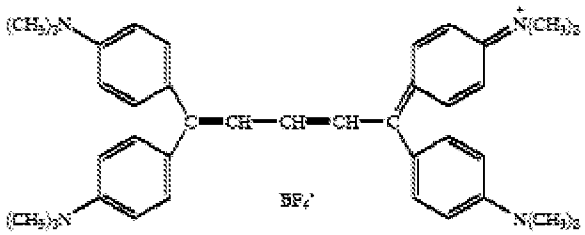
(III) (column 9, line 55).

The compound of formula (III) is equivalent to the compound of formula (2) of the instant application, when R^1, R^2, R^4, R^5 are hydrogen atoms, R^3 and R^6 are $-CH_3$ groups and X^- is a halogen atom, specifically Cl^-.

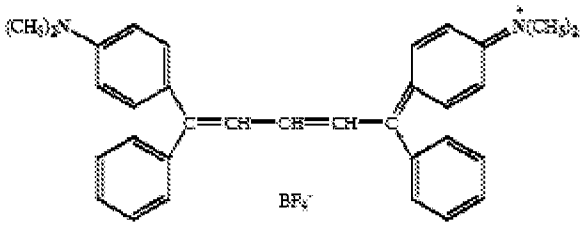
Since the compound of formula (III) meets all the limitations of Hidaka et al. for a cyanine dye of formula (II) as shown above and the compound of formula (IV) is successfully used in the composition for planographic printing plates of Parsons et al. it would have been obvious for one of ordinary skill in the art at the time of the invention to use the cyanine dye of formula (III) as photo-thermal converting material in the composition of modified Hidaka et al.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidaka et al. (WO 00/29214) in view of Takeda et al. (US Pg-Pub 2004/0023153) and Ruckert et al. (US Patent 4,853,314) as applied to claim 1 above and in further view of Tsuruya (JP 2002-189294).

Hidaka modified by Takeda and Ruckert teaches the positive photosensitive composition of claim 1 (see paragraph 7 of the Office Action). Hidaka et al. further disclose that the photo-thermal conversion agent can be a compound of formulas (IV) and (V):



(IV) (compound S-43 on page 22)



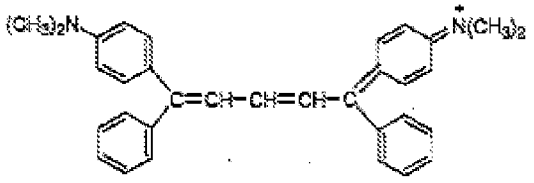
(V) (compound S-44 on page 22) but Hidaka, Takeda nor Ruckert disclose a compound as the one represented by the formula (3) of the instant application.

Tsuruya discloses a positive image forming composition comprising a photothermal converting material and an alkali-soluble resin which contains a novolak resin and/or phenolic resin (abstract). The composition can also contain a dissolution retardant (par.0054), equivalent to the dissolution inhibitor of the instant application and a crosslinking agent, such as Cymel 300 (par. 0055 and par. 0068), which is a melamine-formaldehyde resin, as disclosed in par.0016 of Hu et al. (US Pg-Pub

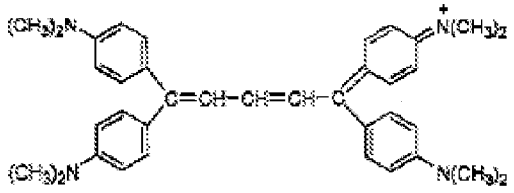
2003/0100686). The positive image forming material of Tsuruya provide a printing plate with a large development latitutde and excellent in processing stability (abstract).

The photo-thermal converting material ("light-to-heat conversion material") is a compound that transform absorbed light into heat, said absorbed light having the wavelength preferably in the range of 800 to 1,100 nm (par.0011).

Tsuruya further discloses that the photo-thermal converting material can be a compound of formula (VI) or (VII):



(VI)



(VII)

(compounds III-1 and III-3 in par.0036), with an anion portion X^- being be p-toluene sulfonic acid (p-CH_3-$C_6H_4SO_3^-$), Cl^-, Br^-, I^-, ClO_4^-, PF_6^-, BF_4^-, benzene sulfonic acid (par.0028).

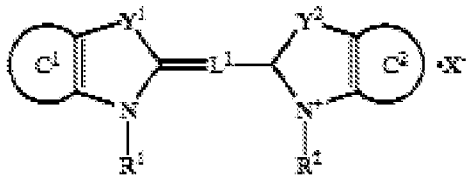
The compound of formula (VI) is equivalent to the compounds of formula (3) of the instant application, where R^7 and R^9 are - $N(CH_3)_2$ groups, R^8 and R^{10} are hydrogen atoms and Y^- is p-CH_3-$C_6H_4SO_3^-$

The compound of formula (VII) is equivalent to the compounds of formula (3) of the instant application, where R^7, R^8, R^9, R^{10} are all - $N(CH_3)_2$ groups and Y^- is p-CH_3-$C_6H_4SO_3^-$.

Since the compounds of formulas (I) and (II) are functionally equivalent to the photo-thermal converting material of formulas (IV) and (V) of Hidaka et al. and are succesfully used by Tsuruya in a positive -working image forming layer of a printing plate (Tsuruya, abstract), it would have been obvious for one of ordinary skill in the art at the time of the invention to use the compounds of formulas (VI) or (VII) as photo-thermic converting material in the composition of modified Hidaka.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidaka et al. (WO 00/29214) in view of Takeda et al. (US Pg-Pub 2004/0023153), Ruckert et al. (US Patent 4,853,314) and Susukida et al. (WO 00/34829, wherein the citations are from the English equivalent, US Patent 6,475,693) as applied to claim 2 above and in further view of Parsons (US Patent 6,280,899).

Hidaka modified by Takeda, Ruckert and Susukida teach a composition of claim 2 above (see paragraph 8 of the Office Action) and Hidaka et al. further disclose that one of the preferred photo-thermal conversion material is a cyanine dye represented by the formula (II):



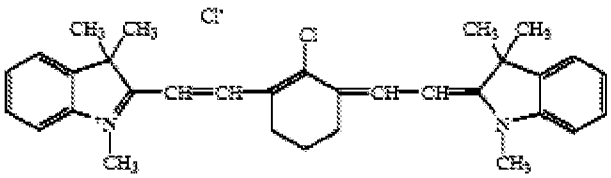
(II) (compound of formula (I) on page 28)

In the formula (II) above, each of the rings C^1 and C^2 can be benzene or naphthalene rings which may have a substituent, each of Y^1 and Y^2 are indepenendent of each other and can be dialkylmethylene groups or sulfur atoms, each of R^1 and R^2 can be hydrocarbon groups which may have a substituent, L^1 is a tri-, penta- or heptamethine group which may have a substituent, provided that two substituemts in said penta- or hepta-methine group may bond to each other to form a C_{5-7} cycloakene ring and X^- is a conterion (page 28, line 24-page 29, line 5).

However, Hidaka, Takeda, Ruckert and Susukida do not specifically disclose the compound of formula (2) of the instant application.

Parsons et al. disclose a heat-sensitive composition for lithographic printing plates comprising an aqueous developer soluble polymer, such as a phenolic resin, a compound that reduces the aqueous developer solubility of the polymer and an infrared absorber.

The infrared absorber can be an organic pigment or dyes such as a phthalocyanine pigment, a dye or a pigment of squarylium, merocyanine, cyanine, indolizine, pyrilium (column 9, lines 23-28). These compounds act as photo-thermal conversion material, as disclosed by Hidaka et al (WO 00/29214, page 28, lines 14-19). Parsons et al. further disclose that the infrared absorbing material can be a compound having the formula (III):



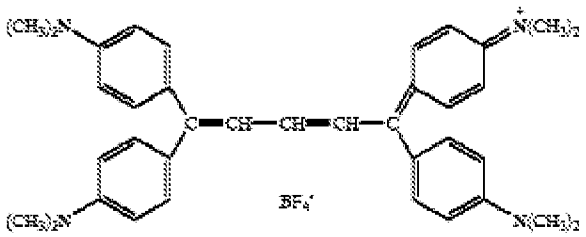
(III) (column 9, line 55).

The compound of formula (III) is equivalent to the compound of formula (2) of the instant application, when R^1, R^2, R^4, R^5 are hydrogen atoms, R^3 and R^6 are -CH_3 groups and X^- is a halogen atom, specifically Cl^-.

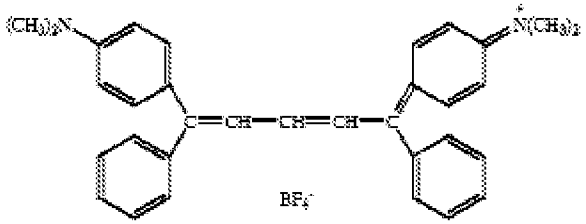
Since the compound of formula (III) meets all the limitations of Hidaka et al. for a cyanine dye of formula (II) as shown above and the compound of formula (III) is successfully used in the composition for planographic printing plates of Parsons et al. it would have been obvious for one of ordinary skill in the art at the time of the invention to use the cyanine dye of formula (III) as photo-thermal converting material in the composition of modified Hidaka et al.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidaka et al. (WO 00/29214) in view of Takeda et al. (US Pg-Pub 2004/0023153), Ruckert et al. (US Patent 4,853,314) and Susukida et al. (WO 00/34829, wherein the citations are from the English equivalent, US Patent 6,475,693) as applied to claim 2 above and in further view of Tsuruya (JP 2002-189294).

Hidaka modified by Takeda, Ruckert and Susukida teach the composition of claim 2 above (see paragraph 8 of the Office Action) and Hidaka et al. further disclose that the photo-thermal conversion agent can be a compound of formulas (IV) and (V):



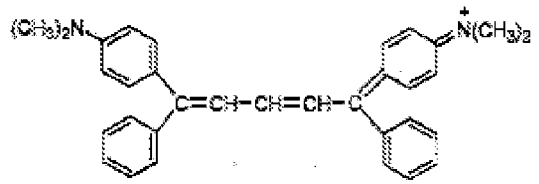
(IV) (compound S-43 on page 22)



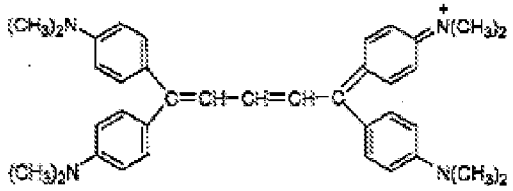
(V) (compound S-44 on page 22) but Hidaka, Takeda , Ruckert and Susukida fail to disclose a compound as the one represented by the formula (3) of the instant application.

Tsuruya discloses a positive image forming composition comprising a photothermal converting material and an alkali-soluble resin which contains a novolak resin and/or phenolic resin (abstract) and a dissolution retardant (par.0054). The positive image forming material of Tsuruya provide a printing plate with a large development latitutde and excellent in processing stability (abstract).

The photo-thermal converting material (“light-to-heat conversion material”) is a compound that transform absorbed light into heat, said absorbed light having the wavelength preferably in the range of 800 to 1,100 nm (par.0011). Tsuruya further discloses that the photo-thermal converting material can be a compound of formula (VI) or (VII):



(VI)



(VII)

(compounds III-1 and III-3 in par.0036), with an anion portion X^- being be p-toluene sulfonic acid (p-CH_3-$C_6H_4SO_3^-$), Cl^-, Br^-, I^-, ClO_4^-, PF_6^-, BF_4^-, benzene sulfonic acid (par.0028).

The compound of formula (VI) is equivalent to the compounds of formula (3) of the instant application, where R^7 and R^9 are - $N(CH_3)_2$ groups, R^8 and R^{10} are hydrogen atoms and Y^- is p-CH_3-$C_6H_4SO_3^-$

The compound of formula (VII) is equivalent to the compounds of formula (3) of the instant application, where R^7, R^8, R^9, R^{10} are all - $N(CH_3)_2$ groups and Y^- is p-CH_3-$C_6H_4SO_3^-$.

Since the compounds of formulas (VI) and (VII) are functionally equivalent to the photo-thermal converting material of formulas (IV) and (V) of Hidaka et al.. and are succesfully used by Tsuruya in a positive -working image forming layer of a printing plate (Tsuruya, abstract), it would have been obvious for one of ordinary skill in the art

at the time of the invention to use compounds of formulas (VI) and (VII) of Tsuruya as photo-thermic converting materials in the composition of modified Hidaka et al.

Response to Arguments

13. Applicant's arguments filed on April 01, 2008 have been considered but are moot in view of the new grounds of rejection.

The applicant's arguments are showing how the amended claims are distinct over the prior art. The arguments have been considered but they are moot in view of the new grounds of rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

In addition to Ruckert et al. (US Patent 4,853,314), the following references evidence that polyvinyl acetate, polyvinylpyrrolidone and copolymer of vinylpyrrolidone and vinyl acetate are conventionally used in addition to novolak resins in positive-working photosensitive compositions:

Buhr et al. (US Patent 4,409,314) disclose light-sensitive mixtures comprising a binder which is soluble or at least swellable in aqueous alkalies, such as novolak resins and additionally, resins such as polyvinyl acetate, polyvinylpyrrolidone and copolymers of the monomers on which these are based (column 3, line 64-column 4, line 19).

Steinmann et al. (US Patent 5,324,804) disclose a positive photoresists (column 1, line 33), which comprise binders such as novolaks (column 7, line 19), poly(4-hydroxystyrene) (column 7, line 35) and additional resins, such as polyvinyl acetate (column 7, line 52).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anca Eoff whose telephone number is 571-272-9810. The examiner can normally be reached on Monday-Friday, 6:30 AM-4:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. E./
Examiner, Art Unit 1795

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1795